

Patent
Atty. Docket No. GEMS8081.160

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of : Busse, Reed F.
Serial No. : Unknown
Filing Date : Unknown
Title : Method and Apparatus To Reduce RF Power In
High Field MR Imaging Incorporating Multi-Phase
RF Pulse Flip Angles
Group Art No. : Unknown
Examining Attorney : Unknown

CERTIFICATION UNDER 37 CFR 1.8(a) and 1.10

I hereby certify that, on the date shown below, this correspondence is being:

Mailing

☒ deposited with the United States Postal Service in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

37 CFR 1.8(a)

☒ with sufficient postage as first class mail

37 CFR 1.10

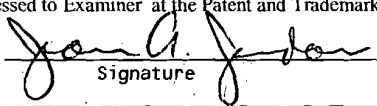
☐ As "Express Mail Post Office to Addressee" Mailing Label No.

Transmission

☐ transmitted by facsimile to Fax No.:

addressed to Examiner at the Patent and Trademark Office.

Date: 7-2-03


Signature

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT
UNDER 37 C.F.R. §1.97/99**

Dear Sir:

In compliance with Applicant's duty of disclosure as set forth in 37 C.F.R. §1.56, listed on the attached equivalent to Form PTO-1449 are those patents, publications and other

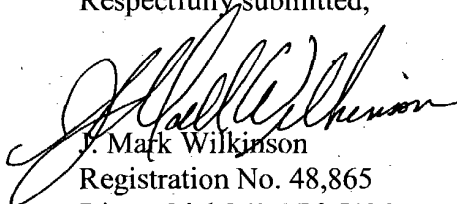
Inventor: Busse, Reed F.

S/N:

information known to the Applicant(s) which may be considered material to the patentability of the claims of the above-captioned application. **One copy of each reference is attached.**

Applicant respectfully request that the documents listed on the attached equivalent to Form PTO-1449 be considered by the Examiner, that the references be made of record in the present application, and that an initialed copy of the duplicate equivalent to Form PTO-1449 be returned to the undersigned in accordance with MPEP 609.

Respectfully submitted,



J. Mark Wilkinson
Registration No. 48,865
Direct Dial 262-376-5170
jmw@zpspatents.com

Date: July 2, 2003
Atty. Docket No.: GEMS8081.160

P.O. ADDRESS:

Ziolkowski Patent Solutions Group, LLC
14135 N. Cedarburg Rd.
Mequon, WI 53097-1416
262-376-5170

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449B/PTO			Complete if Known		
SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Application Number	Unknown	
			Filing Date	Unknown	
			First Named Inventor	Busse, Reed F.	
			Group Art Unit	Unknown	
			Examiner Name	Unknown	
Sheet	1	of	1	Attorney Docket Number	GEMS8081.160

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		HENNIG, J. et al., RARE Imaging: A Fast Imaging Method for Clinical MR, Magnetic Resonance in Medicine, 1986, pp. 823-833, vol. 3.	
		HENNIG, J., Multiecho Imaging Sequences with Low Refocusing Flip Angles, Journal of Magnetic Resonance, 1988, pp. 397-407, vol. 78.	
		LE ROUX, P. et al., Stabilization of Echo Amplitudes in FSE Sequences, MRM, 1993, pp. 183-191, vol. 30.	
		ALSOP, D., The Sensitivity of Low Flip Angle RARE Imaging, MRM, 1997, pp. 176-184, vol. 37.	
		CONOLLY, S. et al., Variable-Rate Selective Excitation, Journal of Magnetic Resonance, 1988, pp. 440-458, vol. 78.	
		HENNIG, J. et al., Easy Improvement of Signal-to-Noise in RARE-Sequences with Low Refocusing Flip Angles, Magnetic Resonance in Medicine, 2000, pp. 983-985, vol. 44.	
		BUSSE, R. et al., Interactive Fast Spin-Echo Imaging, Magnetic Resonance in Medicine, 2000, pp. 339-348, vol. 44.	
		HENNIG, J. et al., Echoes - How to Generate, Recognize, Use or Avoid Them in MR-Imaging Sequences, Part I: Fundamental and Not So Fundamental Properties of Spin Echoes, Concepts in Magnetic Resonance, 1991, pp. 125-143, vol. 3.	
		Pauly, J. et al., Parameter Relations for the Shinnar-Le Roux Selective Excitation Pulse Design Algorithm, IEEE Transactions on Medical Imaging, 1991, pp. 53-65, vol. 10, no. 1.	
		MUGLER, J. III et al., Three-Dimensional T2-Weighted Imaging of the Brain Using Very Long Spin-Echo Trains, Proc. ISMRM, 2000, p. 687.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231